DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-015935
Date Inspected: 22-Jul-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Mr. Li Jia

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girder(OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 5

This QA received ZPMC inspection notification sheet 06250 to perform dimensional inspection of traveler rails identified as 10TR3-027 and 10TR1-006. Dimensional inspections performed on this traveler rail include, but is not limited to, overall length, beam sweep, beam camber, flange tilt and flange warpage. The results of the inspection were recorded on Caltrans (CT) QA form OBG DCP Hand Measurements survey: Traveler Rails and submitted to CT QA lead for review.

BAY- 6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06251.

Magnetic Particle Testing (MT)
This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Edge,

Deck and Bottom Panel weld Components. Total number of welds MT Tested: 33 No's. The weld designations are review as follows:

1. BP3041-001-007, 009, 011,021,044,045,012,026,029.
2. EP3020-001-022, 024.
3. DP3126-001-003~010, 012~015, 017, 018.
4. BP3071-001-002,003,007,008,011, 014,024,025.

Signed off the following green tags:

1.13373
2.13374
3.13380
4.13382

This QA Inspector Randomly observed the following work in progress:

ZPMC personnel heat straightening OBG member identified as EP3013D. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Shu Yang Hua was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 8811.

Shielded Metal Arc Welding (SMAW) welding of weld joint WJF-0-027. Welder is identified as 215083. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

ZPMC Certified Welding Inspector Mr.Li Jia was performing Visual Inspection for the welds located on Deck Panel (DP) identified as DP3072-001.Refer the attached photo for reference.

American Bridge/Fluor QA Inspector was performing MT for the welds located on DP identified as DP3110-001. Refer the attached photo for reference.

BAY- 7

SMAW Tack welding of weld joint FB4105-001-005,006. Welder is identified as 046813. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

SMAW Tack welding of weld joint FB4099-001-005,006. Welder is identified as 054456. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

Flux Cored Arc Welding (FCAW) of weld joint SP3088-001-019,020. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable

WPS: WPS-B- T-2132-3.

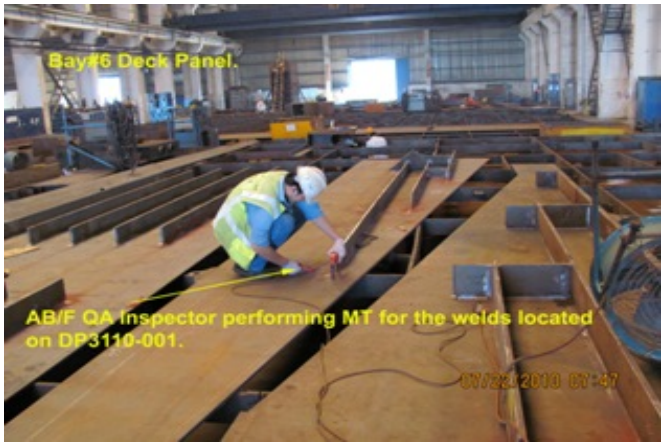
FCAW of weld joint SP3088-001-021,022. Welder is identified as 062447. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint SP3088-001-015,016. Welder is identified as 217185. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

BAY- 8

FCAW of weld joint BK004A3-063-053~055. Welder is identified as 040723. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer